



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D5359-041
Job Sheet 196425-A



Part No: D5359-041

Job Qty: 1 pcs

Part Name: Strut Assembly, LH/RH



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 7/5/19

Job Tracking No:

Due Date: 7/12/19

Created By: Linda Lacelle

Type: Stock

Description:

Note: URF 19-640 DWG REV B SHEETS 1,2,3 IPP Rev: A RQ 16.03.23 Verified by: DD IPP REV:B 17.01.20 AS
PER REV.B DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard	Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	
200	QC 5	1 pcs	7/12/19	7/12/19	0.00	0.00	QC 5 - 10	
							QC 5 - 12	
							QC 5 - 17	
							QC 5 - 18	
							QC 5 - 19	
							QC 5 - 22	
							QC 5 - 24	
							QC 5 - 3	
							QC 5 - 43	
							QC 5 - 49	
							QC 5 - 51	
							QC 5 - 58	
							QC 5 - 68	
							QC 5 - 9	
							QC 5 - 50	
							QC 5 - 30	
							QC 5 - 40	
210	Small Fab - 4 - B4B	1 pcs	7/12/19	7/12/19	0.00	0.79	Small Fab - 1 - B4B	
							Small Fab - 2 - B4B	
							Small Fab - 3 - B4B	
							Small Fab - 4 - B4B	JUL 08 2019
							Small Fab - 5 - B4B	
							Small Fab - 6 - B4B	
							Small Fab - 7 - B4B	
220	QC 5	1 pcs	7/12/19	7/12/19	0.00	0.00	QC 5 - 10	
							QC 5 - 12	
							QC 5 - 17	
							QC 5 - 18	
							QC 5 - 19	
							QC 5 - 22	
							Plex 7/5/19 10:30 AM dart.lacelle.linda	

Plex 7/5/19 10:30 AM dart.lacelle.linda

NCR: 19-7294

JUL 08 2019

				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
230 Packaging 3-1 - Stock - B4B 1 pcs	7/12/19	0.00 0.00		Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
240 QC 21 - SA 1 pcs	7/12/19	0.00 0.00		QC 21 - SA - 21	
				QC 21 - SA - 70	
				QC 21 - SA - 53	

DAS
40
9-89

JUL 09 2019

PC JT 369

DAS
21
JUL 09 2019

Part Op 200 - QC5- Inspect part completeness to step on W/O
Descriptions: 210 - Small Fab - ASSEMBLE CLEVIS AND NUT AS PER DWG
220 - QC5- Inspect part completeness to step on W/O
230 - Identify as per dwg & Stock Location: _____
240 - QC21- Final Inspection - Work Order Release

Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
D2690-6	Lanyard	2 pcs (2 ea)	210-Small Fab - 4 - B4B	
D5359-5	Clevis, Aircraft End	1 pcs (1 ea)	210-Small Fab - 4 - B4B	
D5359-7	Clevis, Basket End	1 pcs (1 ea)	210-Small Fab - 4 - B4B	
MS17984-C405	Pin, Quick Release	1 Ea (1 ea)	210-Small Fab - 4 - B4B	
MS17984-C608	Pin, Quick Release	1 Ea (1 ea)	210-Small Fab - 4 - B4B	
NAS509-6C	Nut	2 Ea (2 ea)	220-QC 5	1xS 106874

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
210-Small Fab - 4 - B4B	D2690-6	2	50	0
	D5359-5	1	8	0
	D5359-7	1	4	0
	MS17984-C405	1	21	0
	MS17984-C608	1	10	0
220-QC 5	NAS509-6C	2	7	0

Part Specifications				
Specifications could not be found.				

010759



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D5359-041
Job Sheet 196425



repair
3

Part No: D5359-041

Job Qty: 4 pcs

Part Name: Strut Assembly, LH/RH



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 6/13/19

Job Tracking No:

Due Date: 7/12/19

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: URF 19-640 DWG REV B SHEETS 1,2,3 IPP Rev: A RQ 16.03.23 Verified by: DD IPP REV:B 17.01.20 AS
PER REV.B DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Small Fab - 1	4 pcs	7/12/19		0.00	3.15	Small Fab - 1		DAS
							Small Fab - 2		71
							Small Fab - 3		9-89
							Small Fab - 4		
							Small Fab - 5		
							Small Fab - 6		19-6-21
							Small Fab - 7		
	Skid tubes - Bend - B4B	4 pcs	7/12/19		0.50	3.85	Skid tubes - Bend - B4B		M66
							Small Fab - 1 - B4B		
							Small Fab - 2 - B4B		DAS
							Small Fab - 3 - B4B		71
							Small Fab - 4 - B4B		9-89
							Small Fab - 5 - B4B		19-6-25
							Small Fab - 6 - B4B		
	QC 5 - 10 to QC 5 - 50	4 pcs	7/12/19		0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		

Part: D5359-041
Job No: 196425
Serial No/Batch: S192717
Inspector:
Exp Date:
Instructions: Various STC's



Container No: S192717
DART Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaero.com

Date: 06/21/19

DAS
40
JUN 27 2019 9:49

			QC 5 - 30	
			QC 5 - 40	
130 Conventional Mill - 1 - B4B	4 pcs	7/12/19	0.00 4.00	Conventional Mill - 1 - B4B
				Conventional Mill - 2 - B4B
140 QC 2	4 pcs	7/12/19	0.00 0.00	QC 2 - 1
				QC 2 - 12
				QC 2 - 14
				QC 2 - 17
				QC 2 - 19
				QC 2 - 2
				QC 2 - 20
				QC 2 - 22
				QC 2 - 23
				QC 2 - 25
				QC 2 - 32
				QC 2 - 33
				QC 2 - 35
				QC 2 - 39
				QC 2 - 4
				QC 2 - 40
				QC 2 - 44
				QC 2 - 45
				QC 2 - 48
				QC 2 - 49
				QC 2 - 50
				QC 2 - 51
				QC 2 - 52
				QC 2 - 57
				QC 2 - 62
				QC 2 - 63
				QC 2 - 8
				QC 2 - 66
				QC 2 - 64
				QC 2 - 65
				QC 2 - 5
				QC 2 - 71
				QC 2 - 73
				QC 2 - 69
150 QC 8	4 pcs	7/12/19	0.00 0.00	QC 8 - 12
				QC 8 - 14
				QC 8 - 17
				QC 8 - 20
				QC 8 - 25
				QC 8 - 3
				QC 8 - 32
				QC 8 - 33
				QC 8 - 35
				QC 8 - 39
				QC 8 - 4
				QC 8 - 44
				QC 8 - 45
				QC 8 - 49
				QC 8 - 58
				QC 8 - 8
				QC 8 - 9
				QC 8 - 68
				QC 8 - 67

				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
160 Powdercoat - 2 White (S)- B4B	4 pcs	7/12/19	0.00 0.75	Powdercoat - 1 - B4B	
				Powdercoat - 2 - B4B	
				Powdercoat - 3 - B4B	
				Powdercoat - 4 - B4B	
170 QC 3	4 pcs	7/12/19	0.00 0.00	QC 3 - 10	
				QC 3 - 13	
				QC 3 - 15	
				QC 3 - 17	
				QC 3 - 18	
				QC 3 - 2	
				QC 3 - 28	
				QC 3 - 3	
				QC 3 - 30	
				QC 3 - 34	
				QC 3 - 36	
				QC 3 - 41	
				QC 3 - 51	
				QC 3 - 58	
				QC 3 - 59	
				QC 3 - 68	
				QC 3 - 9	
				QC 3 - 40	
				QC 3 - 19	
				QC 3 - 43	
				QC 3 - 24	
180 Small Fab - 3 - B4B	4 pcs	7/12/19	0.00 3.15	Small Fab - 1 - B4B	
				Small Fab - 2 - B4B	
				Small Fab - 3 - B4B	
				Small Fab - 4 - B4B	
				Small Fab - 5 - B4B	
				Small Fab - 6 - B4B	
				Small Fab - 7 - B4B	
200 QC 5	4 pcs	7/12/19	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
210 Small Fab - 4 - B4B	4 pcs	7/12/19	0.00 3.15	Small Fab - 1 - B4B	
				Small Fab - 2 - B4B	
				Small Fab - 3 - B4B	
				Small Fab - 4 - B4B	

BL 197-2

Smb 197b

JUL 04 2019

DAS
JUL 05 2019 40
9-89

220 QC 5	4 pcs	7/12/19	0.00 0.00	Small Fab - 5 - B4B	
				Small Fab - 6 - B4B	
				Small Fab - 7 - B4B	
				QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
230 Packaging 3-1 - Stock - B4B	4 pcs	7/12/19	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
240 QC 21 - SA	4 pcs	7/12/19	0.00 0.00	QC 21 - SA - 21	
				QC 21 - SA - 70	
				QC 21 - SA - 53	

Part Op 110 - Small Fab - 1- CUT SQUARE TUBING AT 48.00"

Descriptions: 112 - CNC Alpha 160 Bender - 1- FORM TUBING AS PER DWG USING DT10300 USING CNC BENDER 100 AND FOLIO 32 BEND PROG D5359.

114 - Small Fab - 1- TRIM OFF EXTRA MATERIAL USING DT10300 2- DEBURR

120 - QC5- Inspect part completeness to step on W/O

130 - 1- DRILL 0.194" HOLES THRU 1 WALL ONLY (4PL.) AS PER DWG. (SHEET 3) 2- INSERT D5359-3 INTO TUBING AND USE AS A GUIDE TO FINISH TRANSFER DRILLING HOLE THRU. MODIFY D5359-3 IF NEEDED SO THAT IT FIT IN TUBING. 3- INSERT (AN3) BOLT TO ENSURE PROPER FIT THRU. 4- DRILL WITNESS HOLES TRUE BOTH WALLS AS PER DWG, SHEET 2, DETAIL A AND VIEW B-B

140 - QC2- Inspect parts off machine FAI/FAIB

150 - QC8- Inspect parts - second check

160 - White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel - START TIME: _____ OVEN TEMPERATURE: _____ FINISH TIME: _____

170 - QC3- Inspect Part Finish

180 - Small Fab - 1- ASSEMBLE INSERT IN TUBE AS PER DWG ***DO NOT INSTALL CLEVIS***

200 - QC5- Inspect part completeness to step on W/O

210 - Small Fab - ASSEMBLE CLEVIS AND NUT AS PER DWG

220 - QC5- Inspect part completeness to step on W/O

230 - Identify as per dwg & Stock Location: _____

240 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M304TS0.750W.049	304 Sq Tube .75X.75X.049W	13.3360 ft (3.334 ea)	110-Small Fab - 1	5186641
D5359-3	Insert	8 pcs (2 ea)	130-Conventional Mill - 1 - B4B	5193169
AN3CH11A	Bolt (Drilled Head)	8 Ea (2 ea)	180-Small Fab - 3 - B4B	5016877
AN3CH12A	Bolt (Drilled Head)	8 Ea (2 ea)	180-Small Fab - 3 - B4B	5080446
MS21043-3	Nut	16 Ea (4 ea)	180-Small Fab - 3 - B4B	5181801
NAS1149C0363R	Washer (AN960C10)	40 Ea (10 ea)	180-Small Fab - 3 - B4B	5181423
D2690-6	Lanyard	8 pcs (2 ea)	210-Small Fab - 4 - B4B	5187668
D5359-5	Clevis, Aircraft End	4 pcs (1 ea)	210-Small Fab - 4 - B4B	5019965
D5359-7	Clevis, Basket End	4 pcs (1 ea)	210-Small Fab - 4 - B4B	5142111
MS17984-C405	Pin, Quick Release	4 Ea (1 ea)	210-Small Fab - 4 - B4B	1x513508 - 3x3195831
MS17984-C608	Pin, Quick Release	4 Ea (1 ea)	210-Small Fab - 4 - B4B	5017837
NAS509-6C	Nut	8 Ea (2 ea)	210-Small Fab - 4 - B4B	4x506878 - 3xFT129913

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-Small Fab - 1	M304TS0.7			
130-Conventional Mill - 1 - B4B	D5359-3			
180-Small Fab - 3 - B4B	AN3CH11A			
	AN3CH12A			
	MS21043-3			
	NAS1149C			
210-Small Fab - 4 - B4B	D2690-6			
	D5359-5			
	D5359-7			
	MS17984-C			
	MS17984-C			
	NAS509-6C			

Part S

Specification:

ml
July 9, 2019

Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE



NCR No.

19-7294

Route update only

Job: 196425-A		DISPOSITION		DEPARTMENT/PROCESS			
Part No. D5359 D5359-041		Rework ☒ Scrap ☐ Use-as-is ☐		Skid-tube ☐ Cross tube ☐ Eng. (Non-AW) ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Large Fab ☐ Finishing ☐ Rec/Store/Packaging ☐			
Date:	Sequence #:	Description Work Order Deviation		QTY Affected:			
		D5359-3 insert will not install in tubing (tubing is too small). Tubing should be 0.75 x 0.75 x 0.049, OD should be ±0.005 per spec. ASTM A269. However mat is 0.749 x 0.741 x 0.049 (out of spec).		Disposition			
				Face D5359-3 evenly to allow fit in tubing, face both sides evenly to maintain center of tubing hole. Part is minimally 0.650 x 0.650 Recommend 0.640 x 0.647			
				MRB (QS1042) DAS 51 SAY 12/06/27 9-89 Completed By SAA 19/06/27 9-89 Lead hand / Supervisor <i>SAF</i> 19/07/02 QC / QA Designator 40 9-89			
				Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
				Positioned Wrong ☐ Outside Tolerance ☒ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread ☐			
				Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐			
				Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐			
				Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐			
				Other/Details:			
				Root Cause			
				Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☒ Human Factors ☐			

